David S. Rotenstein, Ph.D. Consulting Historian 10308 Edgewood Avenue Silver Spring, Maryland 20901 Phone: 301.592.0646

Fax: 301.592.0618 Mobile: 240.461.7835

VIA FACSIMILE

11 March 2004

Michael J. Copps, Commissioner Federal Communications Commission 445 12th Street SW Washington, DC 20554

RE: FCC Historic Preservation Policies WT Docket No. 03-128

Dear Commissioner Copps,

The Federal Communications Commission is in the midst of a historic rulemaking proceeding. As the Commission works to retool its licensees' National Historic Preservation Act Section 106 policies, I would like to ask that Commissioners like yourself take the opportunity to solicit more input from the historic preservation community. For nearly three years Commission staff, members of industry, and the Advisory Council on Historic Preservation have discussed Section 106 compliance policies. Despite the many resources committed to these negotiations, there remain many unresolved issues. Among them are the fact that neither the Commission nor the parties involved in the negotiations have solicited expert advice from landscape architects, architectural historians, and cultural geographers – practitioners of the disciplines most involved in evaluating visual impacts. The proposed rules under consideration lack the very important insights professionals from these disciplines might provide that better tailors the compliance process for FCC licensees in ways that make it less expensive and less time consuming while at the same time ensuring that the Commission's actions are consistent with the letter and spirit of the National Historic Preservation Act.

I would also urge the Commission to reconsider excluding existing communications facilities from Section 106 review. These facilities are in many cases the only tangible evidence of the Commission's significant contribution to American history. Among them are early FM radio towers and the infrastructure that facilitated the spread of television and microwave communications. Appended to this letter is a recent newsletter article discussing the pitfalls of excluding the construction of replacement communications towers from Section 106 review. Thank you for your continued interest in this matter.

Respectfully submitted,

David S. Rotenstein, Ph.D.

95. Rotengh

Attachment: "Looking out for the FCC's Towers," *Lookout Network*. (The Newsletter of the Forest Fire Lookout Association, Inc.) Vol 15(1): 12-13 (2004).

E-MAIL: davidsr01@mindspring.com

Web: www.dsrotenstein.com

Looking out for the FCC's Towers

By David S. Rotenstein

There are nearly 200,000 communications towers registered with the Federal Communications Commission. These represent a fraction of the overall population of structures used to mount radio, microwave, and personal wireless services (cellular and PCS) antennas. Since the earliest days of broadcasting, the manufacturers of forest fire lookout towers marketed their structures to the government and communications companies to be used as antenna structures.

Lookout towers, like high-voltage electricity transmission structures, evolved from nineteenth century windmill tower designs. Windmill towers were engineered to support the windmill apparatus while also ensuring protection against wind stresses and ice loads. They were the prototype antenna structure: a functional trestle or derrick built solely to securely hold aloft the intended object, be it a windmill, power lines, or antennas.

In selecting a uniform tower type for the nation's first private sector microwave relay system, Western Union Telegraph Company engineers experimented with several tower forms before settling on what they described as the "Department of Agriculture Heavy Type Forestry Tower." In a summary of the system that was built in the Mid-Atlantic states (Pennsylvania, New York, New Jersey, Delaware, Maryland, and the District of Columbia) between 1945 and 1947, Western Union engineers wrote, "This design was familiar to many fabricators and permitted obtaining standardized towers of various heights by eliminating sections from the top or bottom."

The towers in the former Western Union system and others today are endangered by FCC policies that exclude existing communications towers from compliance with Section 106 of the National Historic Preservation Act. In 2001, the FCC signed a programmatic agreement with the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers to streamline the National Historic Preservation Act (Section 106) compliance process for communications tower builders and wireless telecommunications carriers. One of the



Western Union Red Lion Relay Station, York County, PA



Western Union Bordentown Relay Station, Burlington County, NJ

provisions in this agreement excludes actions such as the removal or addition of antennas (antenna collocation) from existing towers from review under Section 106 (Section 106 of the National Historic Preservation Act requires federal agencies and entities issued federal licenses, permits or funds, to take into account the effects of their undertakings (such as the construction of towers) to historic properties).

Over the past year, the FCC under pressure from the broadcast and wireless industries has sought to further streamline the Section 106 process. In addition to excluding antenna collocation from Section 106 compliance, the FCC now is on the verge of issuing rules and a new programmatic agreement that will exclude the construction of "replacement towers" from the Section 106 review process. This means that parties who own or buy a historic communications tower may demolish the old tower to build a new one in its stead without evaluating the structure under the National Register Criteria for Evaluation and taking its significance into account prior to the construction or demolition action.

United States. Federal Communications Commission, Antenna Structure Registration. Federal Communications Commission, 29 January 2004 http://wireless.fcc.gov/antenna/>.

² Archives Center, National Museum of American History, Smithsonian Institution, Western Union Telegraph Company Records, Box 2, Folder 9, n.d., Uncompleted Manuscript for Engineering Progress 1945-1950, The Western Union Telegraph Company, "Radio Relay Towers."

The former Western Union system provides one tangible illustration of the implications of the earlier and proposed FCC preservation policy changes. In the fall of 1945 Western Union began buying and leasing property along its proposed microwave relay system routes linking its New York headquarters with Washington, DC, Pittsburgh, and Philadelphia. Western Union's sites included forested mountaintops in central Pennsylvania and Maryland and farm fields in Delaware and New Jersey. By early 1947. Western Union had built twenty-one prefabricated lookout towers as antenna structures and the brick and limestone Tenley tower in Washington, DC. Western Union's prefabricated towers were 60-, 100-, and 120-foot steel Aermotor-style towers of the sort sold to the US Forest Service and states for use as forest fire lookouts. The towers were outfitted with parabolic antennas attached to transmitters and receivers designed by RCA to handle the new microwave telegraphy and facsimile traffic. The former Western Union Telegraph Company microwave relay system, and others like it, may be demolished without any actions to document or otherwise mitigate the adverse effects to these structures

Original Fire Lookout Towers in the Western Union Microwave Relay System

New York-Washington-Pittsburgh Radio Relay Triangle and New York-Philadelphia System (Built 1945-1947)

State/Site Name	County	Height When Built
New Jersey		. To give virion Dune
Neshanic	Somerset	100 feet 🐘
Mt. Laurel	Burlington	100 feet
New Brunswick	Somerset	100 feet
Bordentown	Burlington	100 feet
Woodbridge	Middlesex	100 feet
Neshanic	Somerset	100 feet
Delaware		
Brandywine	New Castle	100 feet
Ma ryland		
Severn	Ann Arundel	120 feet 🌷
Gambrill Park	Frederick	60 feet
Sideling Hill	Washington	100 feet
Little Savage	Garrett	120 feet
Cub Hill	Baltimore	100 feet 🚆
Elk Neck	Cecil	100 feet
Pennsylvania		
Allegheny	Somerset	60 feet
Blue Mountain	Franklin	60 feet
Fort Site	Allegheny	100 feet
Honey Brook	Chester	60 feet
Jennerstown	Westmoreland	d 100 feet
Mt. Holly	Cumberland	60 feet
Red Lion	York	100 feet
Sellersville	Bucks	100 feet

The towers listed in this table do not include base stations in New York (Western Union headquarters, Philadelphia, Washington, DC (Tenley site), and Pittsburgh. These facilities were not prefabricated lookout towers.

The FCC's National Historic Preservation Act policies threaten eliminate much of the agency's own engineering history by failing take account the sites that its actions made possible. Licensed by the **FCC** and designed by radio and television's brightest engineers in the vears enveloping World War II. of many the nation's earliest communications facilities were supported by fire lookout towers. Soon, these towers may disappear much



Western Union Little Savage Relay Station, Garrett County, MD

like black and white televisions and rotary telephones unless the FCC develops a policy not to preserve old communications towers as impediments to progress but a policy meant to ensure that these historic properties are taken into account in the Section 106 process.

WANTEDFiretower Hosts



- Spend your Winter in Florida
- Volunteer Positions Available
- · Position Sharing Permitted
- Attractive RV Sites
 With Utility Connections
 Provided.
- · Must be Able to Climb Stairs.

National Forestry
Association
Firetower Host
1-888-GRN-TREE
www.nationalforestry.net